

We claim:

1. The composition comprising 2-amino-6-[(2-amino-5{guanidine}pentanoyl) amino] hexanoic acid (AAGPAHA).
2. A method of synthesizing an RGD peptidomimetic, the method comprising
  - a. combining equal equivalents of Fmoc-Arg(Pbf)-OH and N-[(dimethylamino)-1*H*-1,2,3-triazolo[4,5-*b*]pyridine-1-ylmethylene]-*N*-methylmethanaminium hexafluorophosphate *N*-oxide (HATU) and dissolving in 0.5 M diisopropylethylamine in dimethylformamide (DMF);
  - b. preparing Boc-Lys (Fmoc)-resin by soaking in 20% piperidine and DMF;
  - c. combining the mixture of step a with the Boc-Lys-resin and allowing it to react; and
  - d. purifying the reaction mixture of c by washing with DMF and 20% piperidine.
3. A method of encouraging cell attachment in cell culture, the method comprising
  - a. providing a cell culture substrate; and
  - b. adding the compound of claim 1 to the cell culture substrate.
4. An implant resisting cellular interaction after implantation, the implant comprising
  - a. the implant; and
  - b. a coating on the implant comprising the composition of claim 1.
5. A biomaterial suitable for implantation, the biomaterial capable of resisting cellular interaction after implantation, the biomaterial comprising
  - a. the biomaterial; and
  - b. a coating on the biomaterial comprising the composition of claim 1.
6. A pharmaceutical composition comprising
  - a. AAGPAHA; and
  - b. a pharmaceutical excipient.
7. A method of treating cancer in an individual suffering therefrom, the method comprising

- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.
8. A method of treating thrombosis in an individual suffering therefrom, the method comprising
- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.
9. A method of treating osteoporosis in an individual suffering therefrom, the method comprising
- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.
10. A method of treating retinopathy in an individual suffering therefrom, the method comprising
- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.
11. A method of treating renal insufficiency in an individual suffering therefrom, the method comprising
- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.
12. A method of treating wounds in an individual having at least one wound, the method comprising
- a. providing the pharmaceutical composition of claim 6; and
  - b. administering the pharmaceutical composition to the individual.